

FIG. 1 PRIOR ART

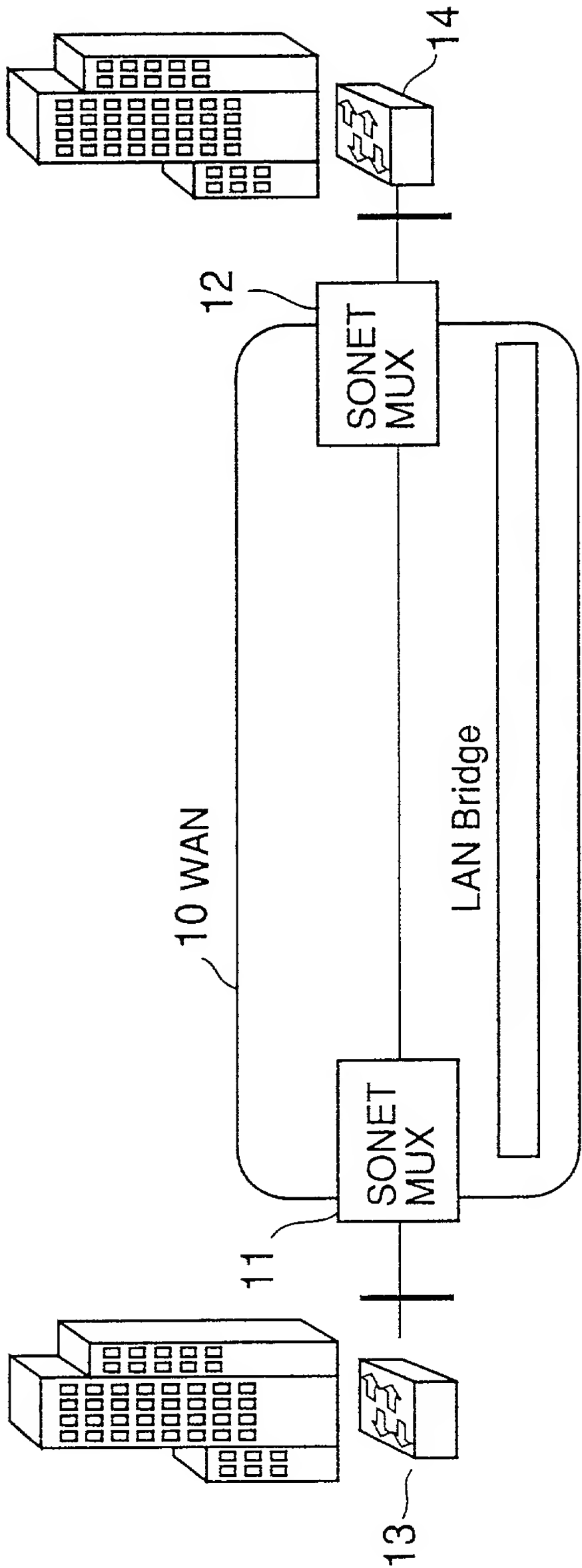


FIG. 2 PRIOR ART

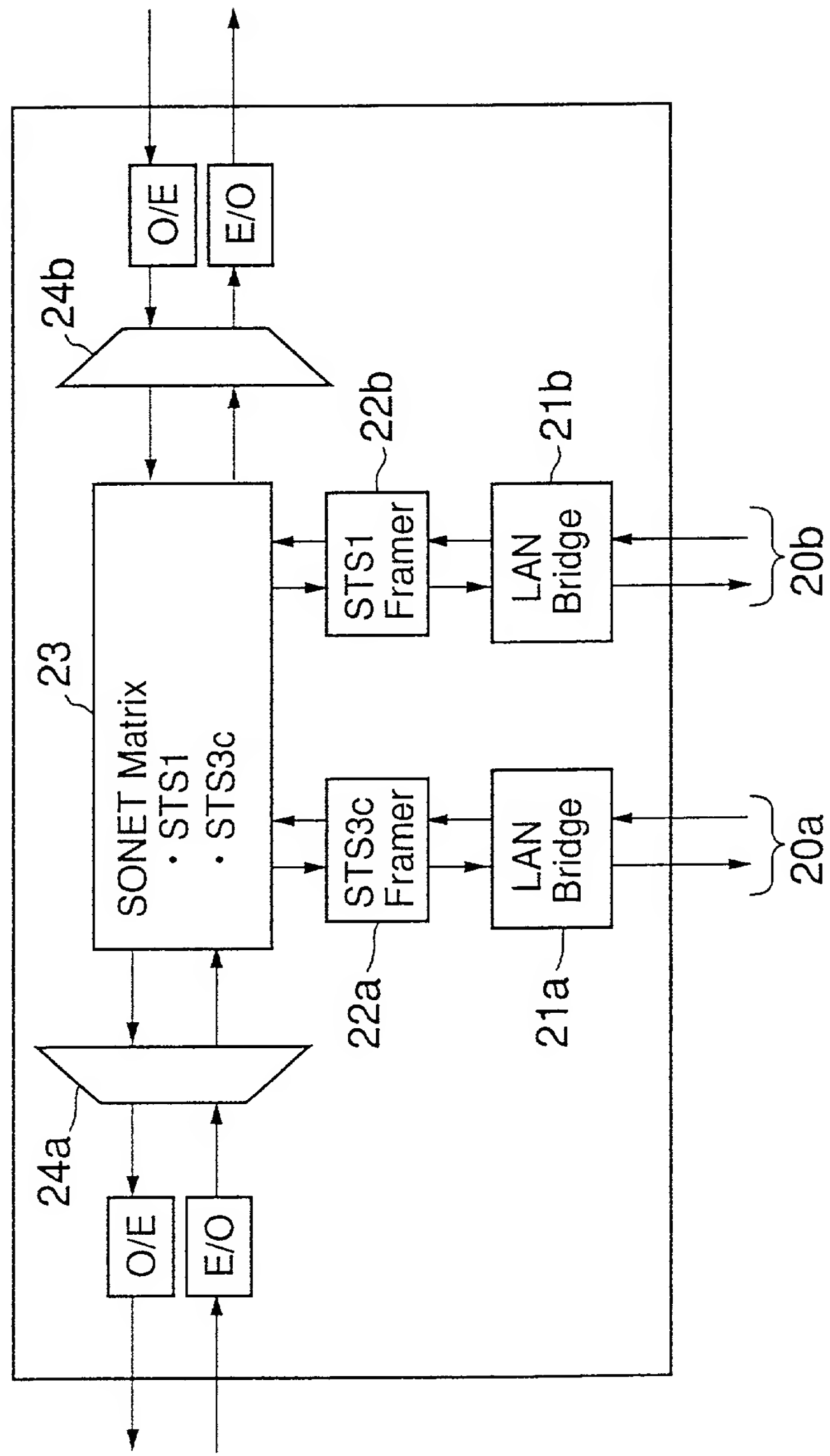


FIG. 3 PRIOR ART

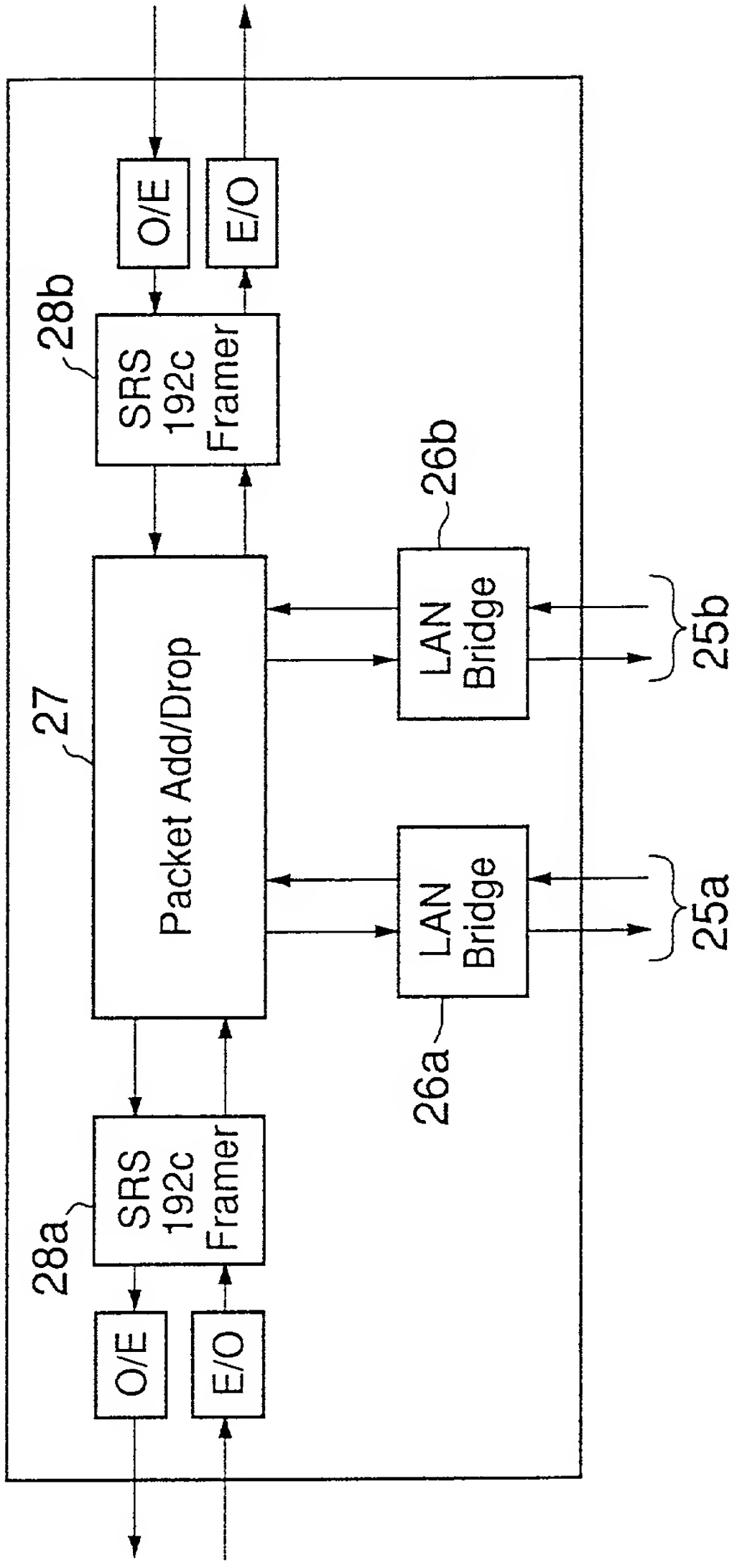


FIG. 4 PRIOR ART

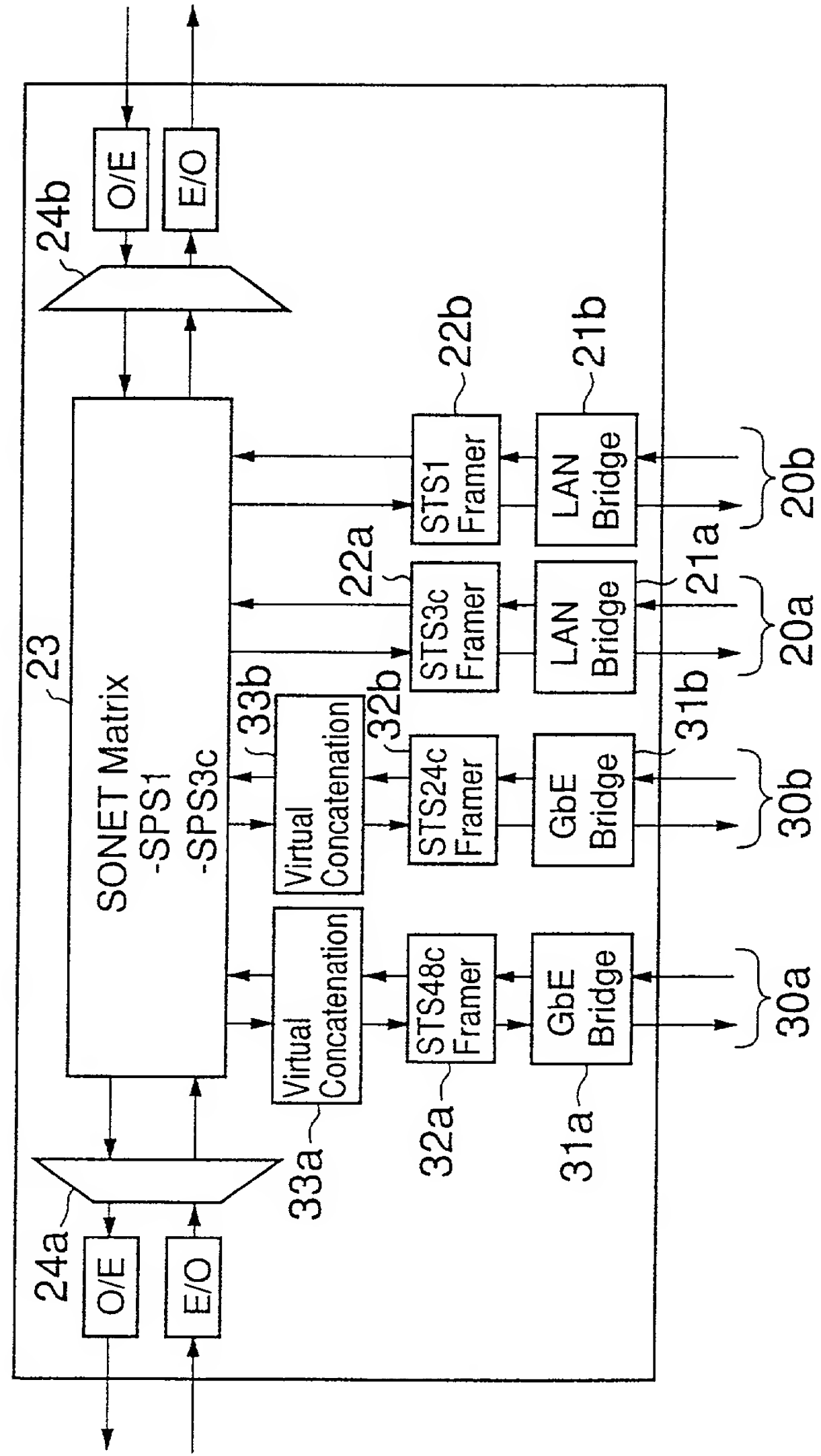


FIG. 5

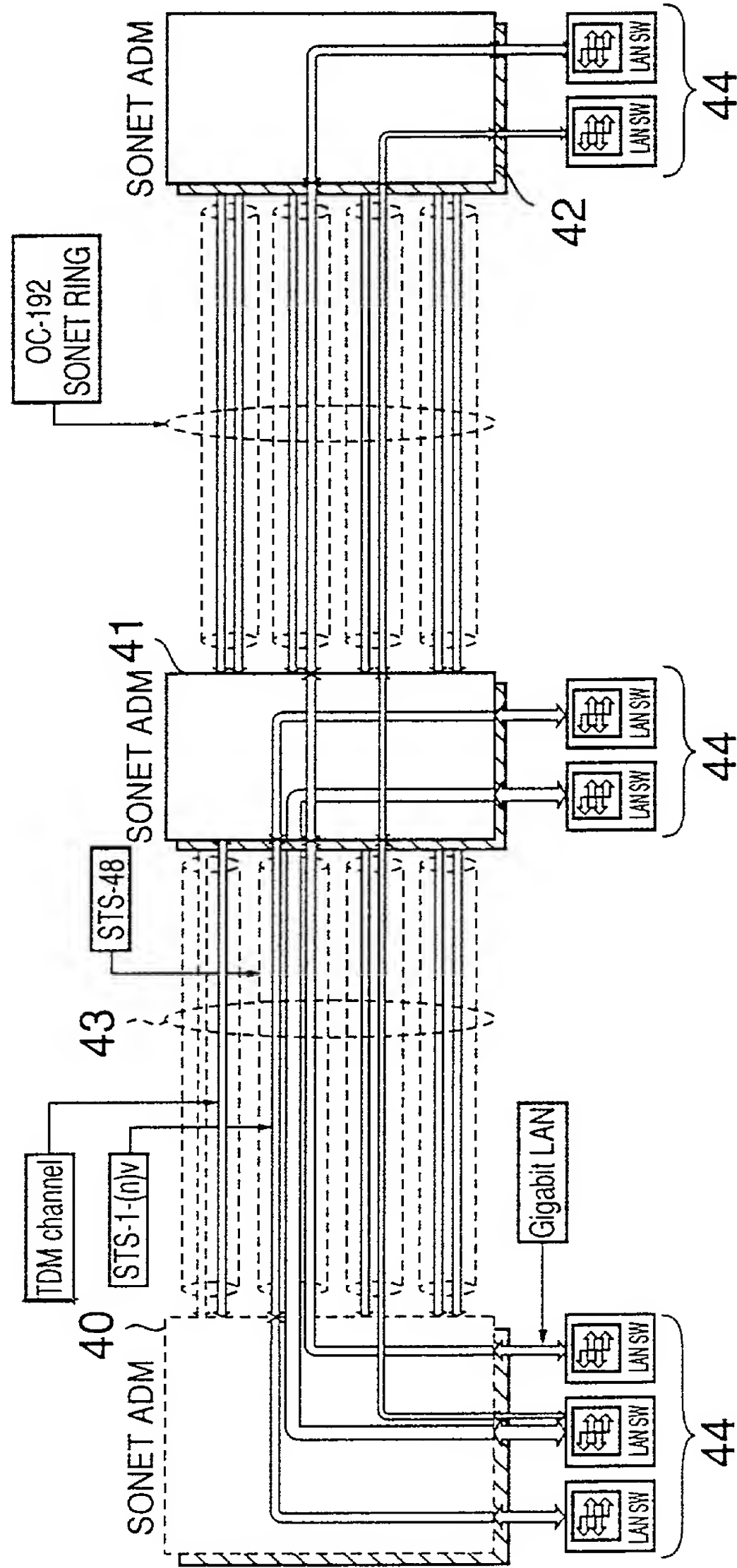


FIG. 6

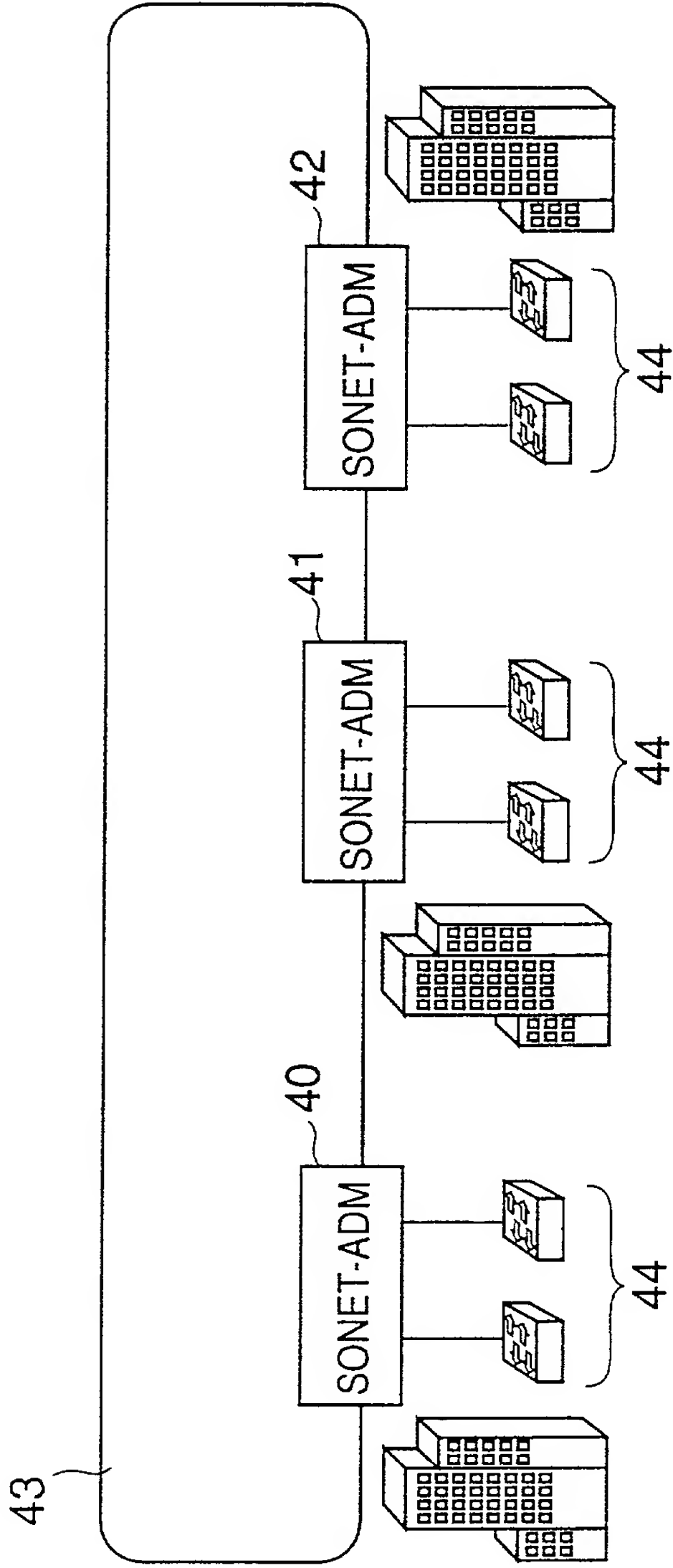
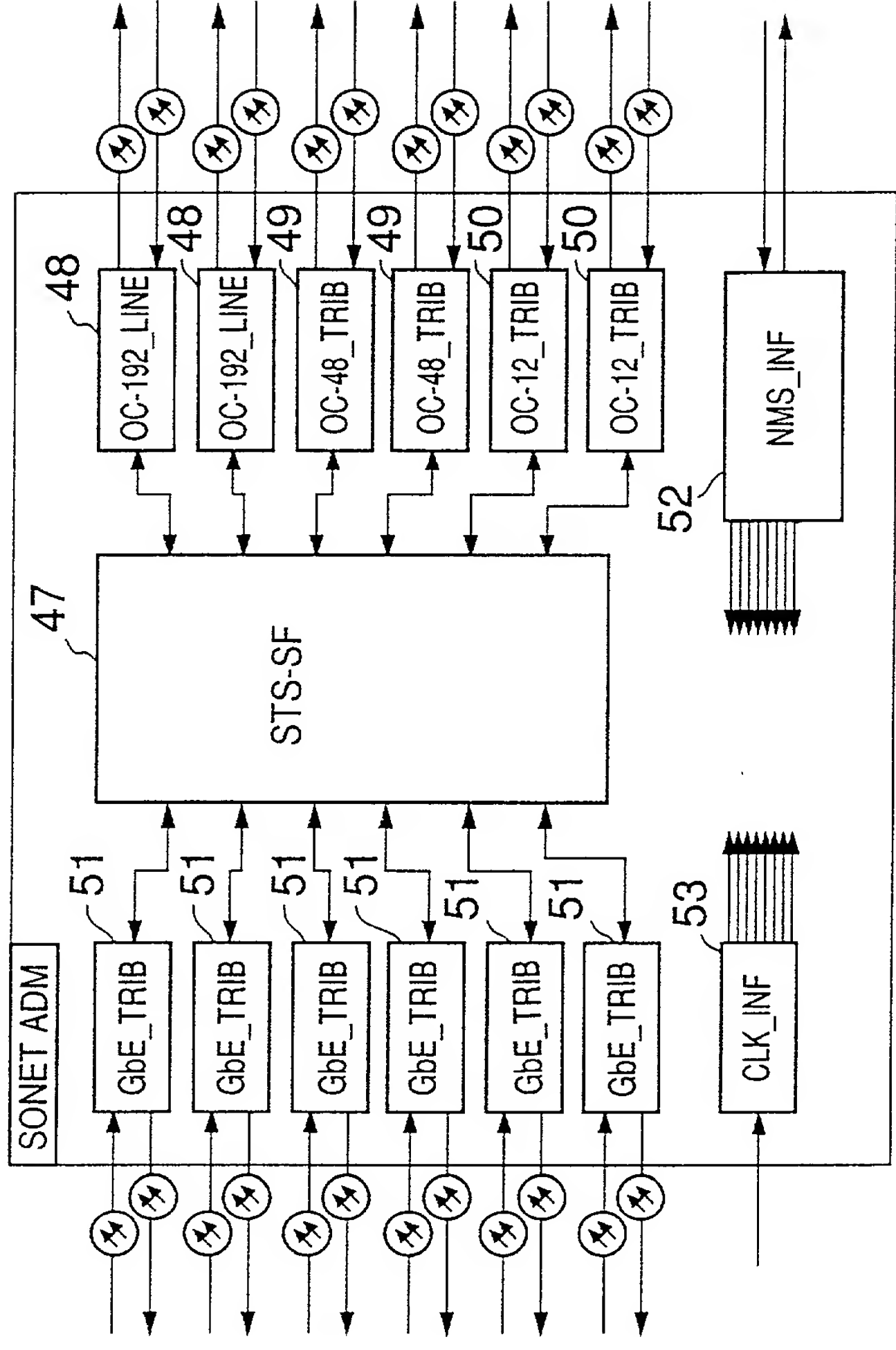


FIG. 7



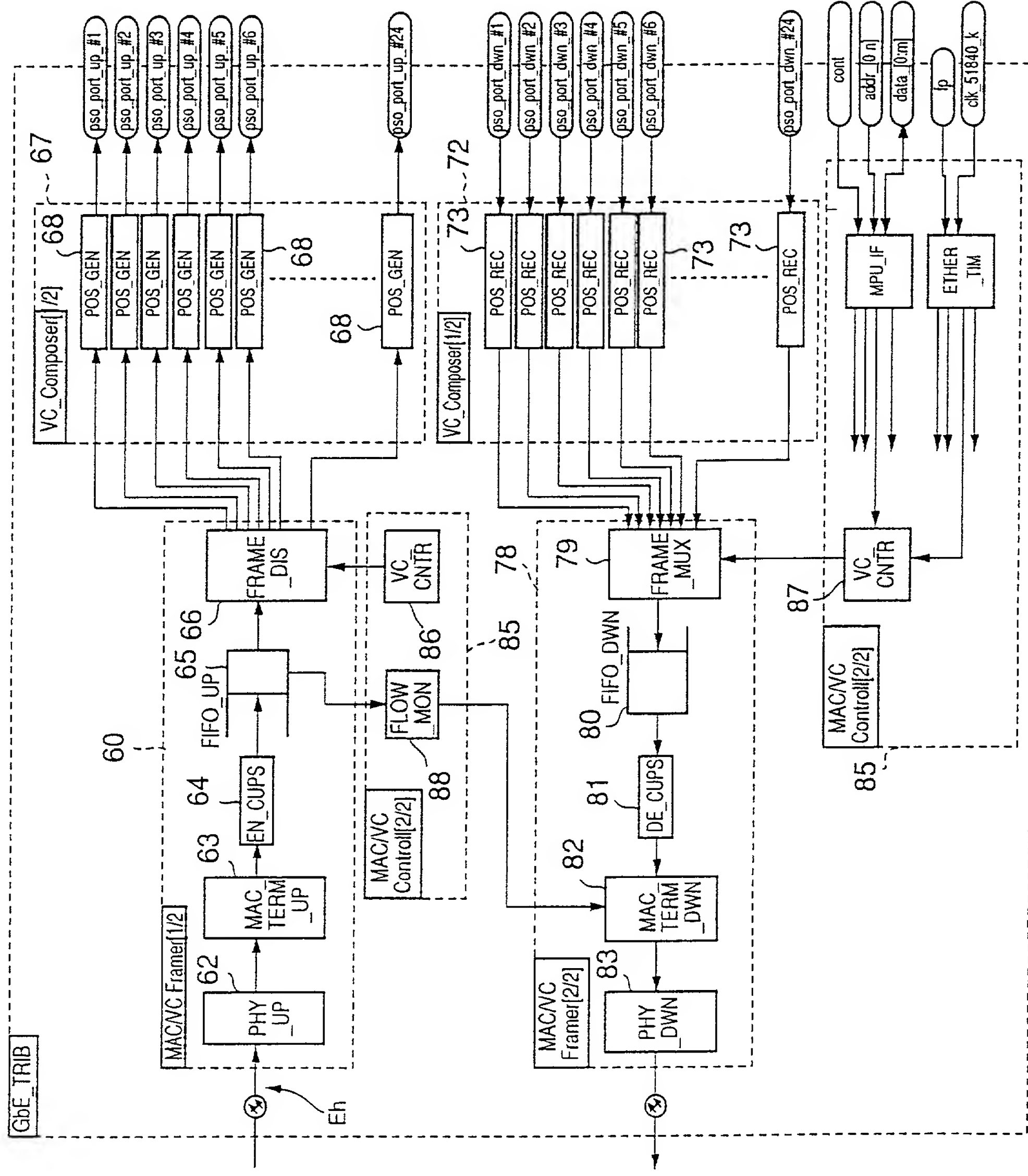
[illegible]

FIG. 9A

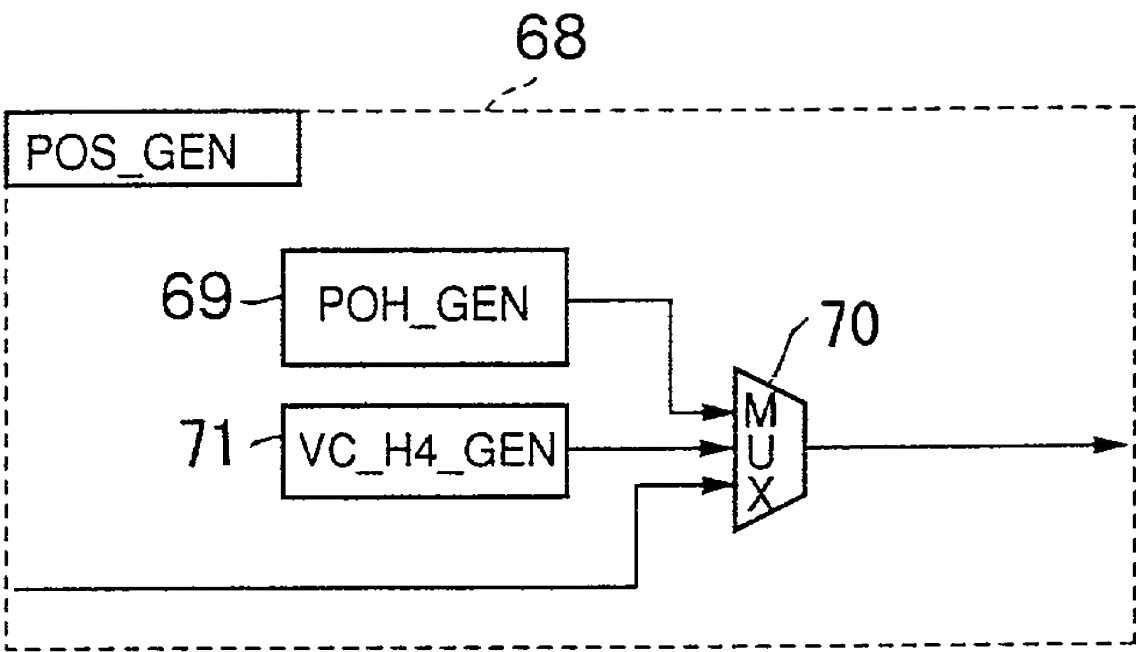


FIG. 9B

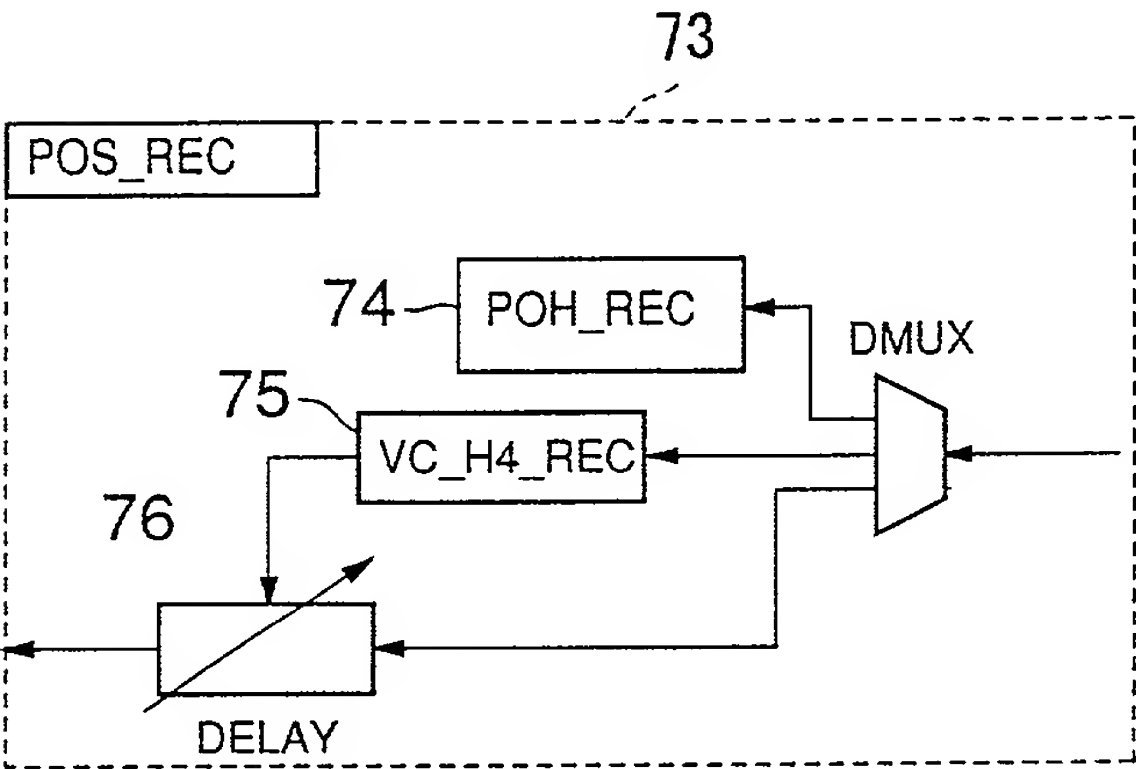


FIG. 11A FIG. 11B FIG. 11C FIG. 11D FIG. 11E

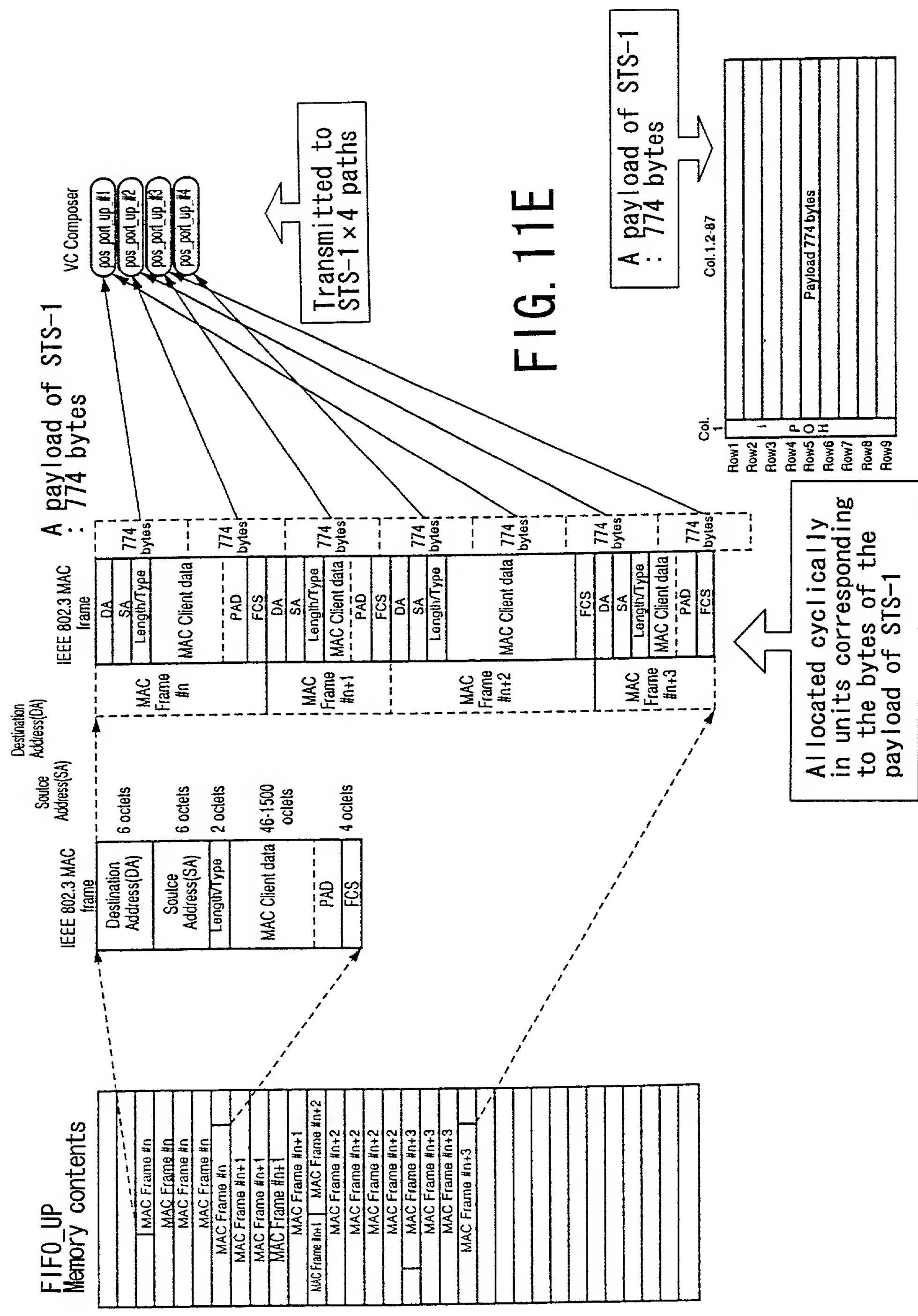


FIG. 12

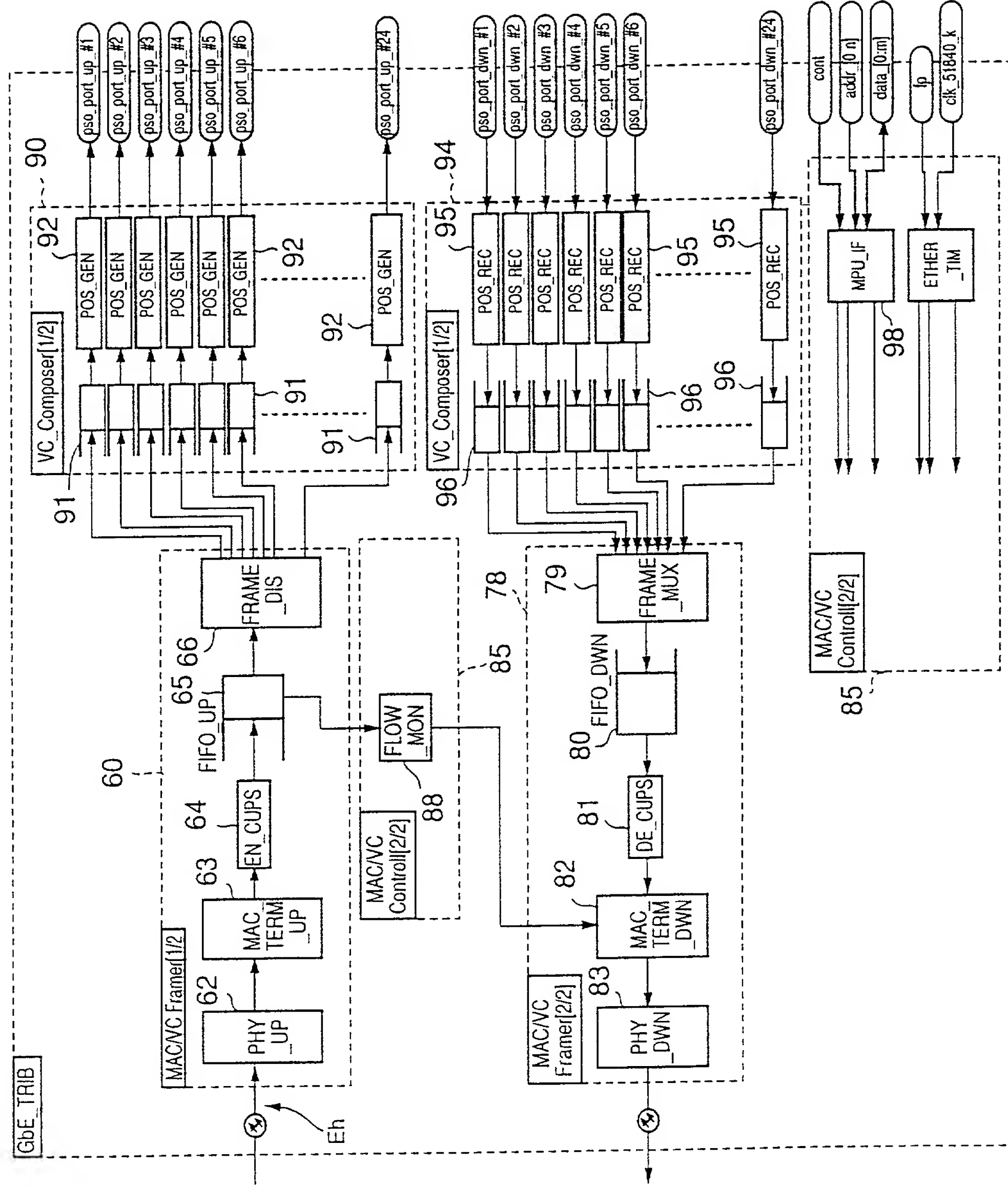
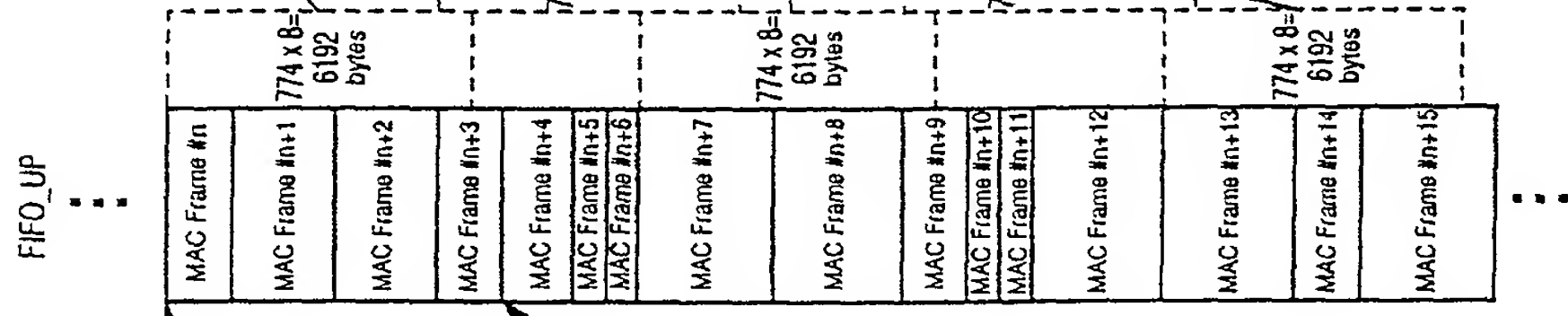


FIG. 13B FIG. 13C FIG. 13D

[illegible]

FIFO UP



The diagram illustrates the MAC and PHY layer structure for 1000BASE-T. It is divided into two main sections: MAC and PHY.

MAC Layer:

- FIFO_CH_UP #1:** Contains MAC Frame #n (774 x 8 bytes) and MAC Frame #n+1 (6192 bytes).
- FIFO_CH_UP #2:** Contains MAC Frame #n+2 (774 x 8 bytes) and MAC Frame #n+3 (6192 bytes).
- FIFO_CH_UP #3:** Contains MAC Frame #n+4 (774 x 8 bytes) and MAC Frame #n+5 (6192 bytes).
- FIFO_CH_UP #4:** Contains MAC Frame #n+6 (774 x 8 bytes) and MAC Frame #n+7 (6192 bytes).

PHY Layer:

- PHY #n:** Receives input from MAC #n and outputs to 1000BASE-T PHY.
- PHY #n+1:** Receives input from MAC #n+1 and outputs to 1000BASE-T PHY.
- PHY #n+2:** Receives input from MAC #n+2 and outputs to 1000BASE-T PHY.
- PHY #n+3:** Receives input from MAC #n+3 and outputs to 1000BASE-T PHY.

The 1000BASE-T PHY is connected to the 1000BASE-T PHY, which is connected to the 1000BASE-T PHY.

VC Composer

Transmitted to
STS-1 x 4 paths

Allocated to a FIFO of each channel in units corresponding to 1 msec and a MAC frame (a packet); 1 msec corresponds to 8 STS frames ($774 \times 8 = 6192$ bytes)

FIG. 14A

FIFO_UP
Memory contents

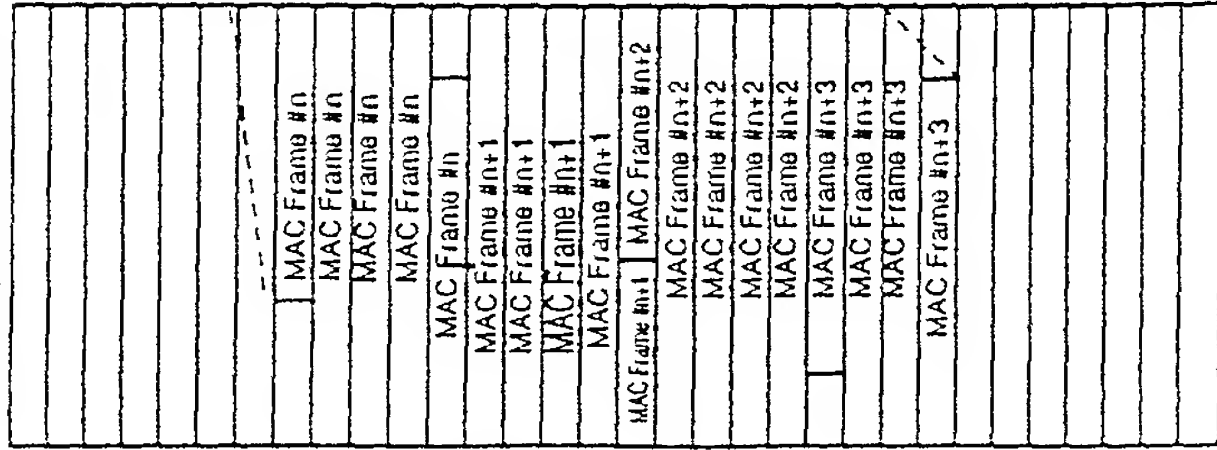


FIG. 14B

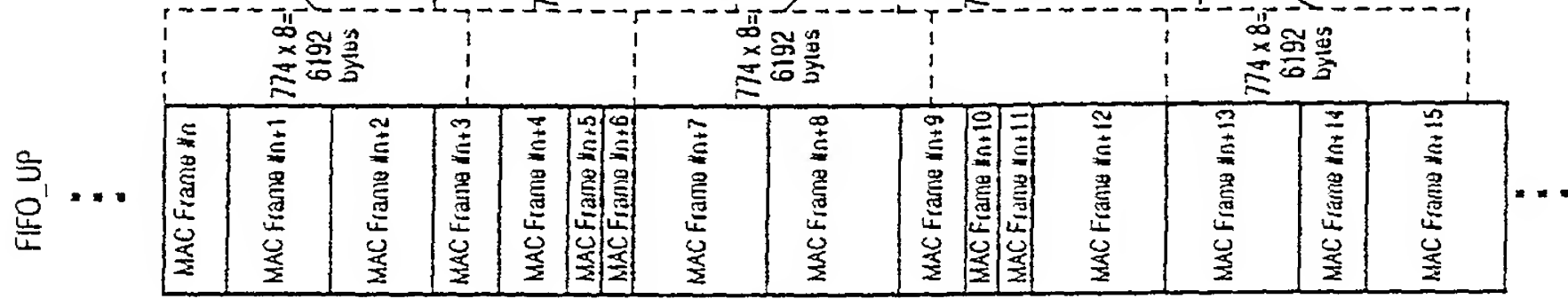


FIG. 14C

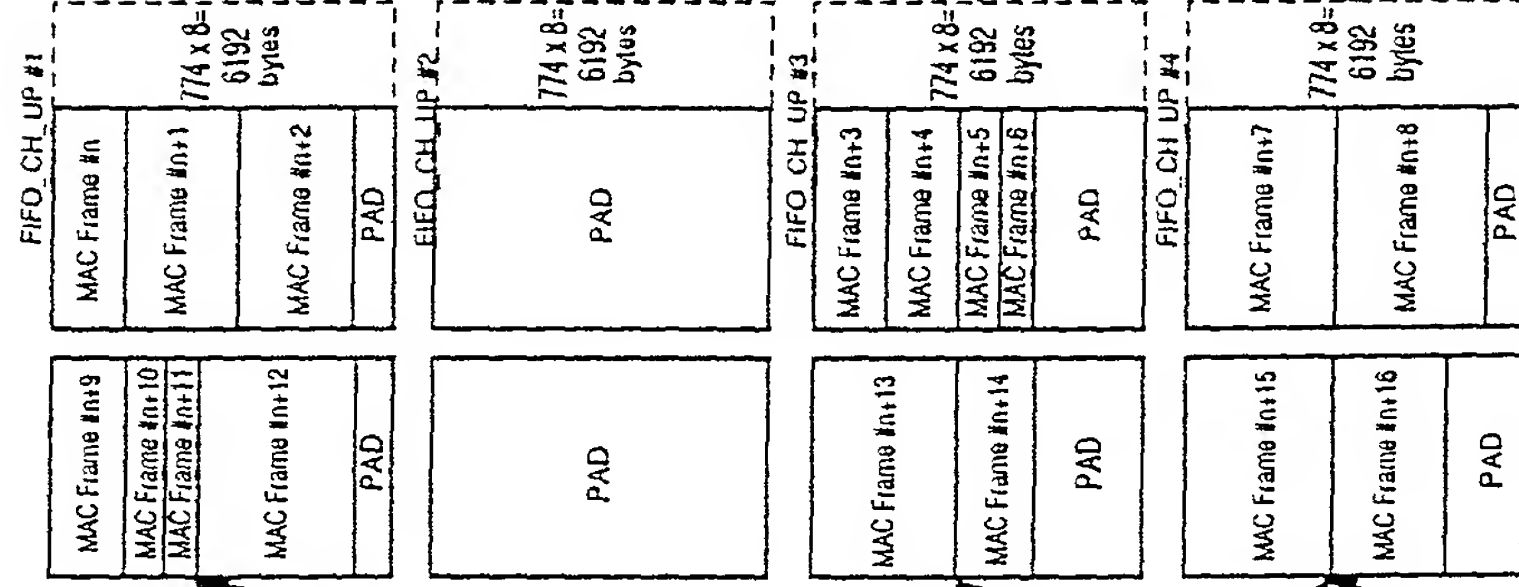


FIG. 14D

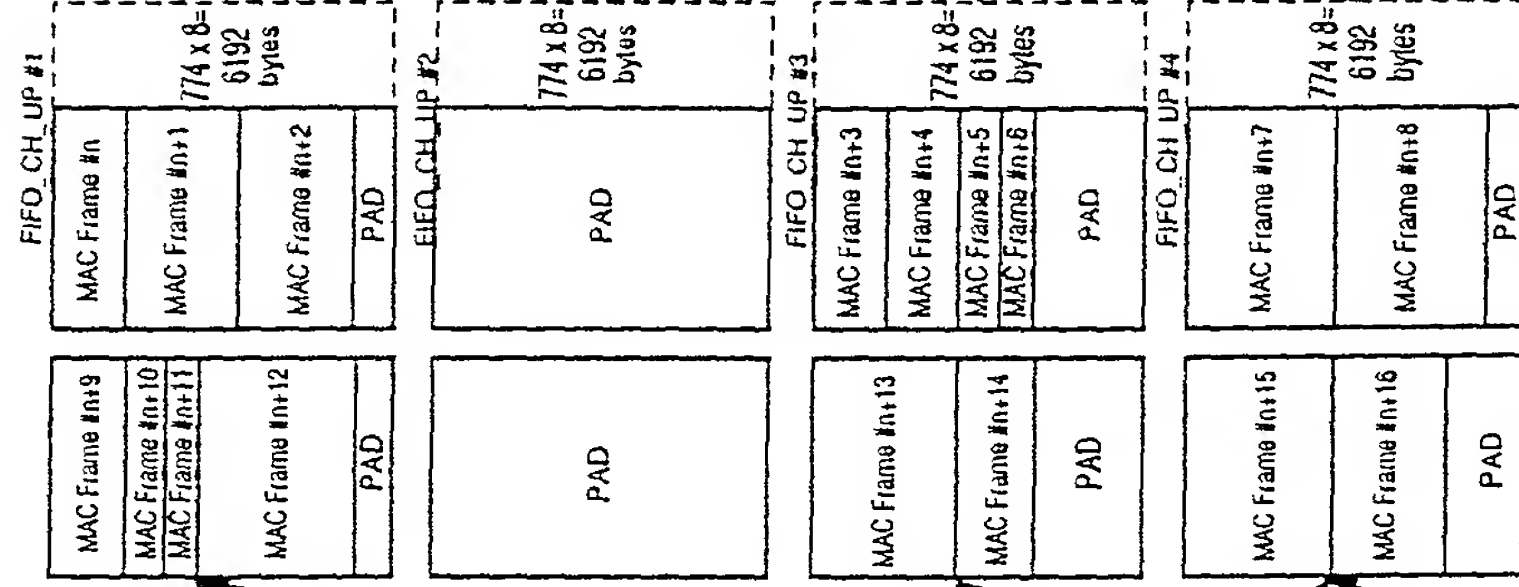
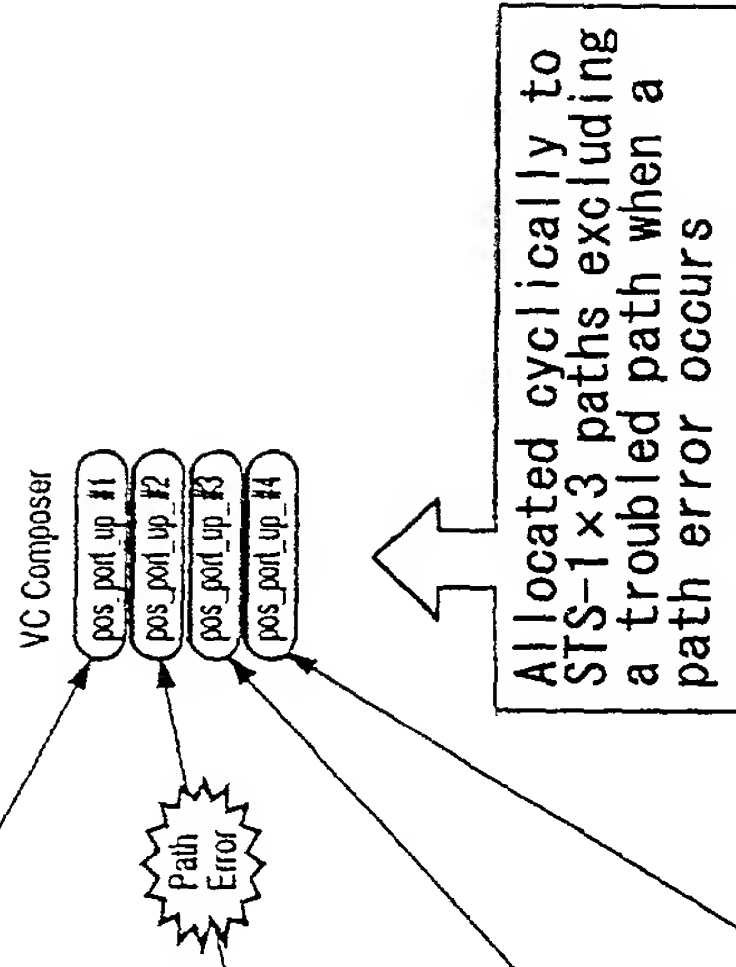


FIG. 14E



Allocated cyclically to STS-1 x 3 paths excluding a troubled path when a path error occurs

Allocated to a FIFO of each channel in units corresponding to 1 msec and a MAC frame (a packet); 1 msec corresponds to 8 STS frames (774 x 8 = 6192 bytes)

FIG.15

